

Peak shaving capital

Peak shaving is one the most common domestic uses for LNG today: Peak shaving is when LNG is stored at a power plant so that in times of peak demand the utility can tap into the LNG in order to increase power output to meet demand spikes. This most often occurs during the winter and summer months when abnormally cold or hot temperatures cause spikes in electricity demand.

There are two types of peak shaving facilities. While both types have on-site LNG storage tanks, one has on-site liquefaction facilities and the other lacks on-site liquefaction capabilities. Peak shavers with liquefaction facilities are able to take natural gas directly from pipelines, liquefy it, and store it for later use. Peak shavers without liquefaction facilities must rely on LNG tanker trucks to refuel their LNG storage tanks.

There are over 50 operating peak shaving facilities in the United States today. One half of peak shaving facilities are located in the Northeast while a quarter are located in the Midwest. Of the over 1.3 billion gallons per year of peak shaving capacity in the United States, almost 1 billion is located in these two regions.

Companies are using new business models to take advantage of peak shaving capacity: Low prices and the environmental benefits of natural gas are driving demand in Caribbean and Central American counties where heavy fuel oil and diesel fuel have historically been responsible for a large share of electricity generation. Demand for natural gas in Caribbean and Central American nations is growing rapidly, but the gross amount of natural gas demand is still meager with ~5 mtpa of demand today. However, this number could double by 2020.

Markets of this size are too small to be serviced by large-scale export projects in North America. One company, Carib Energy, has developed a new business model to help supply Central America and the Caribbean with LNG.

As a result of new natural gas supply from unconventional plays, greater demand for LNG domestically for peak shaving and other uses, and LNG for power generation in Central America and the Caribbean it is likely that more small-scale LNG projects will be planned and completed leading to overall greater LNG capacity in the United States.

"ADI Analytics work was so good it sparked a discussion with our cost estimators ... we eventually adjusted our numbers." — Business Development Manager, Oil & Gas Major

All articles published by MDPI are made immediately available worldwide under an open access license. No special permission is required to reuse all or part of the article published by MDPI, including figures and tables. For articles published under an open access Creative Common CC BY license, any part of the article may be reused without permission provided that the original article is clearly cited. For more information,

please refer to <https://>

Feature papers represent the most advanced research with significant potential for high impact in the field. A Feature Paper should be a substantial original Article that involves several techniques or approaches, provides an outlook for future research directions and describes possible research applications.

Editor's Choice articles are based on recommendations by the scientific editors of MDPI journals from around the world. Editors select a small number of articles recently published in the journal that they believe will be particularly interesting to readers, or important in the respective research area. The aim is to provide a snapshot of some of the most exciting work published in the various research areas of the journal.

Rana, M.M.; Atef, M.; Sarkar, M.R.; Uddin, M.; Shafiullah, G. A Review on Peak Load Shaving in Microgrid—Potential Benefits, Challenges, and Future Trend. *Energies* 2022, 15, 2278. <https://doi.org/10.3390/en15062278>

Rana MM, Atef M, Sarkar MR, Uddin M, Shafiullah G. A Review on Peak Load Shaving in Microgrid—Potential Benefits, Challenges, and Future Trend. *Energies*. 2022; 15(6):2278. <https://doi.org/10.3390/en15062278>

Contact us for free full report

Web: <https://sumthingtasty.co.za/contact-us/>

Email: energystorage2000@gmail.com

WhatsApp: 8613816583346

